

### **REMARKS**

Claims 17-19 and 21-27 are pending in the present application. Claim 17 is amended and new claims 22-26 are added by the present amendment.

The Applicants respectfully request that the Application be reconsidered in view of the above amendments and the following remarks.

#### **I. EXAMINER INTERVIEW**

On January 31, 2007, the undersigned met with the Examiner along with Dr. Ben Ward and Dr. Jian Xiang, who are both named inventors in the Application. The Applicants greatly appreciate the courtesy and assistance provided by the Examiner during the interview.

During the interview, Drs. Ward and Xiang showed samples of self-sustaining, bonded fiber wick structures of the invention and compared them to non-woven materials similar to those disclosed in Abed et al., U.S. Patent No. 7,081,423 ("Abed Patent"), which was cited in the pending Office Action. It was pointed out that the self-sustaining three dimensional structure is achieved, not merely because of compaction of the fibers, but because of the large number of fiber-to-fiber bonds.

The discussion then turned to how claim 17 could be amended to better distinguish the Abed Patent. The undersigned noted that claim 17 already recites that the fibers are bonded to each other at multiple contact points. The undersigned then proposed that claim 17 be amended to specifically recite that these contact points be on surfaces defined by the polyamide fiber component. This would avoid the Abed Patent because Abed does not disclose a non-woven material having polyamide-to-polyamide (i.e., Nylon-to-Nylon) bonds.

The undersigned also pointed out that dependent claim 20 distinguishes the Abed Patent because it recites a sheath-core fiber with a polyamide sheath component. This clearly distinguishes Abed because the fibers used for the Abed non-woven materials must have an exposed cellulose ester component. The Examiner agreed that this appears to distinguish the claimed wicks from the teachings of the Abed Patent.

## **II. THE CLAIMS ARE PATENTABLE OVER THE CITED ART**

### **A. Paragraph 2 Rejection of Claims 17, 18 and 20**

Claims 17, 18, and 20 stand rejected under 35 U.S.C. § 102(e) as being allegedly anticipated by the Abed Patent. Claim 20 has been canceled, thereby rendering its rejection moot. The Applicants respectfully traverse this rejection with respect to claims 17 and 18.

#### **1. Claim 17**

Claim 17 recites, *inter alia*, a bicomponent fiber wick comprising a self-sustaining fluid transmissive body formed from a plurality of bicomponent fibers bonded to each other at spaced apart contact points. Each bicomponent fiber has a fiber structure comprising first and second fiber components with the first fiber component being formed from a polyamide material. As amended, claim 17 now includes the language of claim 20 that states that the first fiber component forms a continuous bicomponent fiber sheath along the length of the bicomponent fiber and the second fiber component forms a continuous bicomponent fiber core surrounded by the sheath.

#### **2. The Abed Patent**

The Abed Patent is directed to nonwoven materials made from bicomponent fibers where one component is formed from cellulose ester. Abed Patent, Abstract and col. 1, lines

12-19. Abed discloses using such materials for making diapers, disposable towels, and self-adhesive grip materials. Abed Patent, Abstract and claim 1.

The disclosed non-woven materials may be made from core-and-sheath ("core/sheath") and side-by-side ("side/side") bicomponent fibers. Abed Patent, col. 2, lines 44-53. The fibers are restricted, however, in that they must include a cellulose ester component that is "accessible to fluids such as air, water and other liquids." Id. More particularly, "any bicomponent fiber in which the cellulose ester is covered or masked by the second polymer . . . is excluded." Id.

The second component of the bicomponent fiber can be any polymer selected from the group consisting of polyolefins, polyester and polyamides. Abed Patent, col. 3, lines 18-24. The Abed Patent discloses that in sheath-core fibers, the ratio of this second material to the cellulose acetate sheath material may range anywhere from 10-90% to 90-10%. Abed Patent, col. 3, lines 62-64. There is no corresponding disclosure for side-by-side fibers.

The Abed bicomponent fibers can be formed into a nonwoven material using a spunbond process after melt extrusion. Abed Patent, col. 4, lines 7-17. A plurality of individual bicomponent fibers can also be combined to form a "tow" of fibers which can be formed into a nonwoven material using either threaded rollers or an air jet. Id. Staple and short fibers can be formed into nonwoven materials by carding, air-laying, wet-forming and dry-forming. Id.

### 3. The Abed Patent Does Not Disclose the Features of Claim 17

The Applicants respectfully submit that claim 17 is patentable over the Abed Patent because Abed does not disclose a self-sustaining bonded fiber wick as recited in claim 17. Specifically, the Abed Patent does not disclose a wick formed from a plurality of

bicomponent fibers bonded to each other at spaced apart contact points, wherein (1) each bicomponent fiber has a first fiber component formed from a polyamide material and (2) the first fiber component forms a continuous sheath surrounding the second fiber component.

To begin with, the Abed Patent does not disclose a self-sustaining bonded fiber structure as the that term is used in the Application. At most, Abed describes a loosely bonded non-woven material, such as would be used in disposable diapers.

Moreover, as discussed in the Examiner Interview, Abed does not disclose, and in fact explicitly excludes, the use of sheath-core fibers that do not have a cellulose ester sheath. This, of course, clearly teaches away from the polyamide sheath component recited in claim 17.

For at least the above reasons, the Applicants submit that the Abed Patent does not teach, disclose or suggest--and, in fact, teaches away from--the features of claim 17. The Applicants therefore respectfully request that the rejection of claim 17 under 35 U.S.C. 102(e) be withdrawn.

#### 4. Claim 18

Claim 18 is dependent on claim 17, which has been shown to be patentable over the cited reference. The Applicants submit that claim 18 must also be patentable over Abed and, therefore, respectfully request that the rejection of claim 18 under 35 U.S.C. 102(e) be withdrawn.

**B. Paragraph 4 Rejection of Claims 17-21**

Claims 17-21 stand rejected as being allegedly unpatentable over the Abed Patent under 35 U.S.C. § 103(a). Claim 20 has been canceled, thereby rendering its rejection moot. The Applicants respectfully traverse this rejection with respect to claims 17-19 and 21.

Claims 17 and 18 were discussed above and have already been shown to be patentable over the Abed Patent. The Applicant submits that claims 19 and 21 are dependant on claim 17 and, thus, are also patentable over the Abed Patent.

Based on the above, the Applicants respectfully request that the rejection of claims 17-19 and 21 under 35 U.S.C. 103(a) be withdrawn.

**III. NEW CLAIMS**

The present Amendment adds new dependent claims 22-26. Claims 22-25 correspond to originally filed claims that were dependent on claim 1. The original claims were canceled based on the indication of allowability of claim 17 in the Office Action dated August 14, 2006. Claim 26 is added to recite a geometric feature of the self-sustaining bonded fiber wick. Support for this addition may be found in the specification at paragraphs 00023 and 00031.

The Applicants submit that no new matter is added by the addition of these claims.

**IV. CONCLUSION**

For at least the reasons set forth above, the Applicants respectfully submit that pending claims 17-21 are in condition for allowance. The Applicants believe that new claims 22-26 are also in condition for allowance. The Applicants therefore request that the present application be allowed and passed to issue.

Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact the Applicant's undersigned representative.

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Respectfully submitted,



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